

Figure 1. The sequence of the 3-frame His.tag and its 3-frame translation. Location of features:

1. MCS: 283-299 (3'-> 5')

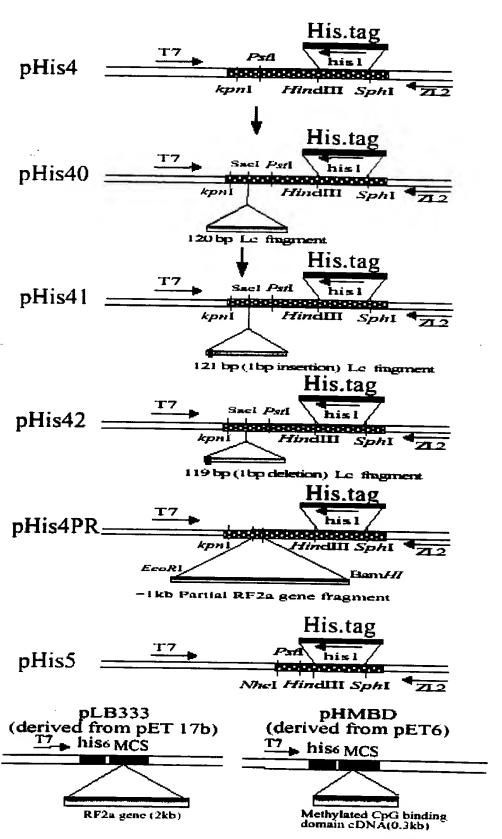
2. Fragment containing T7 promoter region from pET17b: 299-402

3. Fragment containing a 3 5'UTR of E. coll ompA gene from pTriplEX: 403-631

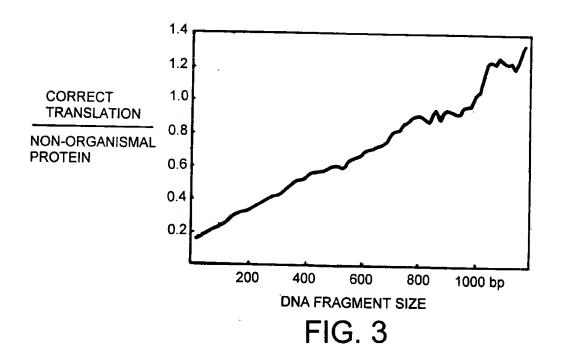
4. Backbone from pZL1: 632-4603, 1-196

5. 3-frame His.tag: 196-283 (3'-> 5')

FIG. 1



The constructs made for 3-frame His.tag test FIG. 2



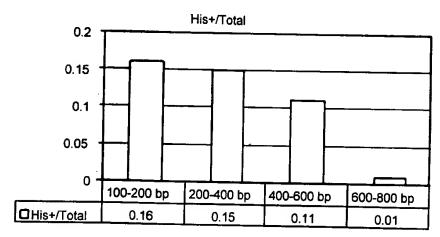


FIG. 4

NUCLEIC ACID MOLECULES ENCODING MULTIPLE STAR DONS AND HISTIDINE TAGS Patrick Schnable et al. 09/897,776

T7 promoter

## $\underline{TAATACGACTCACTATAG} GGAGACCACAACGGTTTCCCTCTAGAAATAATTT$

TGTTTAACTTTAAGAAGGAGATATACATATGGCATGGCCA Ribosome binding site Triple-ATGs

FIG. 5A

## **MCS**

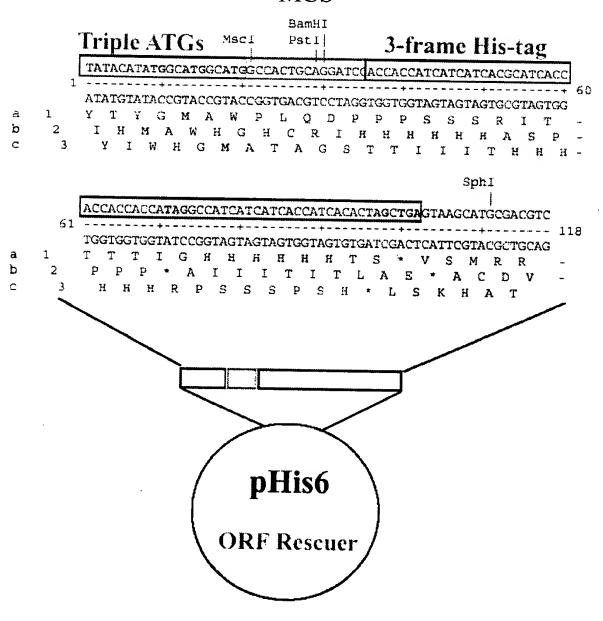


FIG. 5B

## Plasmid library (dsDNA)

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Production of ssDNA in vivo and Purification of ssDNA by HAP Chromatography

Flow-through: ssDNA Tracer

PCR amplification dsDNA Driver



Denaturation and Hybridization (Cot~5)

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HAP Flow-through

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Conversion of ssDNA to dsDNA and transformed into E. coli

Normalized library  $\bigcirc\bigcirc\bigcirc\bigcirc\bigcirc\bigcirc$ 

(Method of Marcelo Bento Soares, Genome Research 6: 791-806, 1996)

FIG. 6

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## BLAST analyses of ORF Rescue Fragments

☑ Gene hits☑ Repetitive sequences☐ Novel ORFs

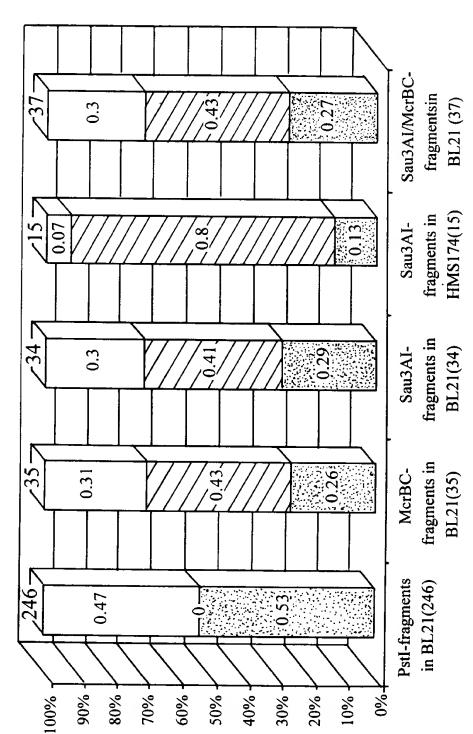


FIG. 7